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PLANT

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 1 1927

REPORT FOR WEEK ENDING OCTOBER 1, 1927.

HAVRE:

The weather conditions during the last week interfered to a certain extent with threshing operations. There have been several small local shwowers with cool, cloudy weather.

Corn on the rotations was harvested and quite a large part of it will mature corn. The soil has been a little too dry for good fall plowing so only the plots on which plowing was necessary were plowed.

The last date of seeding sorgo and Sudan grass was harvested an hauled in. The silo, which has a capacity of 200 tons, is pretty well filled from a field of 10 acres. This field is on subirrigated ground.
Maximum temperature 79, minimum 31; precipitation, .16 inch.

JUDITH BASIN:

With favorable, but cool weather progress of fall work was excellent in the Basin during the past week. Most of the spring wheat has now been harvested and threshed. Only late seeded wheat remains standing. All seeding of winter wheat is completed and fields are coming on in fair condition.

Threshing of most of the forage and miscellaneous crops on the station is completed. Sweet clover seed will be threshed as soon as practicable. All root crops were harvested. Potato strains and tests were also dug. Potato yields were above average in spite of being lowered by disease. They also carried a high percentage of No. 1 quality. Increase fields of corn were harvested with the exception of the hogging off pasture experiments. Fall plowing on the rotations was completed and plowing on the forage project is in progress.
Maximum temperature 76, minimum 28; precipitation, .14 inch.

HUNTLEY:

The past week has been cloudy with light showers and several foggy mornings which have delayed haying operations to some extent. Threshing of small grains has practically been completed in this locality and bean threshing has started. Bean yields are reported as very good and the quality fair to excellent.

Field work on the plots has consisted of piling beans, shocking fodder crops, threshing the winter wheat nursery and planting the winter wheat variety test.
Maximum temperature 75, minimum 26; precipitation, .22 inch.

SHERIDAN:

Rain the first of the week and again the middle of the week delayed field work here considerably. Fall plowing of the rotation plot was begun the 28th and the 'E' plots of the MC series were subsoiled at that time. Fall plowing of the rotations, except two plots, was completed today. Rains had soaked the ground to just about the plowing depth.

Winter wheat and rye were seeded in the rotations the 30th, and the varieties of winter wheat were seeded today. Cutting of corn and late forage crops was completed the first of the week.

Potatoes in Rotation 37 were dug the 28th. The crop was the best yet secured here in this rotation, yielding at the rate of 137 bushels to the acre.

Practically no threshing was possible in this section during the week, although considerable threshing still remains to be done.
Maximum temperature 68, minimum 27; precipitation, 1.39 inches.

DICKINSON:

Fair weather continued through most of the week with temperatures about normal.

The first frost of the season came on September 20 about a week later than average. The growing season was 133 days, as the last frost was on May 10. The warm days of early September had matured crops so that little damage was done by the frost. Corn was far enough along so that it will provide much feed although some of the later fields were not fully mature. Early planted fields were mature enough so that plenty of seed can be secured if it is husked before severe freezes come. Most of the corn on the station was run into the silo soon after the frosts.

Threshing was completed except about a half day's work in the nursery. About 20 per cent of the grain on farms in the district is yet to be threshed.

Plowing on the rotations was finished October 1.

Most of the potatoes were dug. The yields ranged from almost 200 to as high as 325 bushels. The highest yield of the varieties so far weighed was from a Seedling 41914 supplied by the U. S. Department. Due to the good yields, potatoes are selling for only 50 cents a bushel.

Dickinson, continued:

The September rainfall amounted to 1.45 inches. The total for the six months ending September 30 was 15.56 inches, or 3.52 above the average. Since January 1 the rainfall amounts to 16.58 inches.
Maximum temperature 65, minimum 25; precipitation, .06 inch.

MANDAN:

Agronomy

Fall plowing has been in progress during the past week. The soil is in fair condition for plowing, but is somewhat dry.

Winter wheat and winter rye were seeded on September 27. This is the second latest date winter rye has been seeded since the station started.

Potatoes were dug in the rotations and yielded about 200 bushels per acre. They are all very good quality.
Maximum temperature 61, minimum 21; precipitation, .04 inch.

Cooperative Grazing Experiment

The cattle made good gains during September. A few of the steers now show over 400 pounds per head gain for the season to date.

The 30-acre steers were moved to the reserve pasture at the end of September. Their loss during the month was light, but they were out of feed, and would have lost heavily during the next two weeks.

The following are gains, in pounds, per head, for September and for the season to date:

Pasture	No. Steers	September	135 Days
100-acres	10	60	349.5
70- "	10	56	350.5
50- "	10	29	339.5
30- "	10	-6.5	242.0
70- " (Rot.)	14	39.6	312.9
25- " (Brome)	6	30.8	375.8

Mandan, continued:

Arboriculture

Recent frosts have caused the leaves to drop from the Northwest poplar in the nursery, so digging and pulling was started on September 28. Considering the small size of the cuttings from which this stock was grown, the trees have made an excellent growth.

The three men who inspected shelterbelts this summer have now all returned to school, John L. Emerson and Lewis Matthew going to the Forestry School at the University of Montana, Missoula, and Ernest J. George to the College of Forestry, University of Minnesota, St. Paul. All these men are senior students in Forestry.

Horticulture

Heavy frosts during the fore part of the week severely damaged all unpicked plums, but were not heavy enough to hurt apples and crabs. Plum varieties that were damaged include Terry, Wolf, Wyany, Stoddard, Hawkeye, Kaw, Kiowa, Emerald, Omaha, Burwood, DeSoto, and other late varieties.

Practically all fruit is now picked. Virginia crabs were picked on October 1. Only a few late varieties of apples such as Hibernal and Malinda remain on the trees. Longfield apples have been partly picked and are yielding heavily this year.

Potatoes in the variety trials were dug on September 30. Yields will probably average better than 200 bushels to the acre. Irish Cobbler and Triumph potatoes looked especially good this year.

ARDMORE:

The first snow of the season fell on Monday. Part of the snow melted but by evening it had reached an average depth of about three inches. The ground was practically bare again Tuesday noon. The weather was favorable from Wednesday until Friday afternoon when rain started falling. Today, Saturday, rain has been falling slowly but steadily since early morning.

Field work consisted of digging potatoes, baling hay and sowing winter grains.

Ardmore, continued:

The foundation of the new engine house was poured on September 29.

The total precipitation for September was 1.01 inches; to date for this year precipitation is 18.84 inches.
Maximum temperature 77, minimum 19; precipitation, .87 inch.

ARCHER:

The week has not been favorable for field work in that during the forepart there was rain, snow and fog. Then followed two days of good weather. Friday morning started off with rain and snow which continued most of Saturday.

Due to these weather conditions field work has been limited to the putting up of corn silage. Seventeen acres of corn were cut and all but a small portion was put in the silo. Other work at the station has consisted of cleaning grain, building grain bins and repairing thresher and other machinery.
Maximum temperature 71, minimum 23; precipitation, 1.04 inches.

AKRON:

The first snow of the season fell on Monday when for a short while the ground was white. The minimum temperature on both Sunday and Monday nights was 27, constituting the second severe frost of the fall.

Rotation 269 winter wheat plot was top dressed with manure early in the week. The rate and spacing corn project ground was seeded to Turkey Red winter wheat on the 28th. The 21 wether lambs from the plots were loaded out of Otis for Denver on Wednesday. The wether lambs averaged 87.5 pounds each off the pastures.

Harvesting of the row crops was continued with the result that by this week end practically everything is in the shock.

Rotation winter wheat plots seeded the 10th are emerging unevenly except on corn land where no emergence is yet noticeable. The sheep rotation winter wheat fields are up and beginning to cover the ground. About 1/5 the area of sheep rotation 28 winter wheat field was reseeded this week end to replace damage caused by grasshoppers which came in off sweet clover on the reserve field and sod land to the west to damage the stand on the southwest corner of the field.

Akron, continued:

Rains early in the week followed by cool, cloudy weather followed by a rain of .33 of an inch on Friday night should bring wheat up evenly on all soil preparations.

Mr. and Mrs. R. R. Staples, of the Cedara Agricultural College of Natal, South Africa, visited the station early in the week. Mr. Staples is interested in grazing problems and has been making a tour of the intermountain grazing regions since landing in San Francisco earlier in the season. He spent Monday afternoon on the station going over the sheep pastures. On Tuesday he was driven to the commercial grazing areas west and north of Akron.

Maximum temperature 80, minimum 27; precipitation, .84 inch.

NORTH PLATTE:

Low temperatures, cloudiness, and considerable rain have been the chief weather characteristics during the week. Frost again occurred on several nights but minimum temperatures did not reach the low mark recorded on the 21st. On account of lower maximum temperatures the mean is considerably lower than that of the previous week. For the past three weeks mean temperatures have been 75.3, 54.9 and 45.4 degrees, respectively.

Rain during the week amounted to 1.21 inches, bringing the totals for September to 4.03 and 3.42 inches from bench and hill gauges, respectively.

Work during the week has consisted in seeding fall grains, digging potatoes, and shocking forage crops.

COLBY:

There is ample moisture in the soil now for germination and emergence of winter wheat. The rainfall for the week just closing was .54 of an inch. This, together with that which had fallen the previous week, made the soil plenty wet for drilling at any time during the week.

Seeding of experimental plots, that had been delayed by the rain which fell the night of the 22nd, was completed on the 29th. This makes all winter wheat seeded on the station with the exception of some date of seeding plots.

Colby, continued:

The wheat seeded previous to September 22 is coming up. Some wheat was covered too deep by the rains, but by the soil staying damp good stands are expected. Wheat seeding is general now. Wheat seeded in corn ground on the 5th and 6th of September is showing a good stand since the rain.

When it was dry enough, sorghums were cut for feed during the week. Part of this afternoon was devoted to cutting milo. Milo is just about mature enough so that frost would not damage it. There are a few green spots of milo in the plots. It is not planned to cut the D. L. A. sorghum plots until the latter part of the coming week, unless frost comes the fore part of the week. On both Sunday and Monday night the temperature dropped to 32 degrees, but very little vegetation showed any effect of the low temperature. A heavy fog or mist hung low both nights.

The past week was characterized by low temperatures, frequent showers, and wet surface soil.

Precipitation for September amounted to 2.68 inches, which compares with a 40-year average of 1.59 inches. The total rainfall for the year to date is 17.20 inches. This is 1.39 inches above a 40-year average for the same nine months period.

GARDEN CITY:

Temperatures dropped to 35 on two nights during the week and the sky was cloudy the greater part of four days. Three showers totaling 6 of an inch of moisture were recorded.

Crops have not recovered much from the hail damage of last week. It will probably be necessary to harvest most of the milo plots the first of the week, or as soon as the soil is dry enough to permit the use of the binder. There are still many heads that are not mature, but it is thought the loss from down stalks would amount to more than the loss caused by immature grain.

Kafir is still standing fairly well and will not be harvested until frost. The forage sorghums are down so bad that harvesting by hand will be necessary.

All except four winter wheat plots were seeded yesterday. These four were too wet to seed. Broomcorn was also pulled yesterday.

Garden City, continued:

Farmers are complaining that grasshoppers are taking the early seeded wheat. Little damage has been done on the station by that pest.
Maximum temperature 74, minimum 35; precipitation, .6 inch.

DALHART:

The weather has been threatening during the past week. For several days it looked as if the Panhandle might be visited by frost. There has been plenty of wind all week with an excess on two days. One day there was considerable soil blowing over the country, which necessitated some cultivation on the station for protection. The wind has been cold during the entire week. Precipitation was recorded on two days netting .10 inch for both.

Crops have been maturing quite rapidly considering the weather which has prevailed. Some harvesting was done this week on the rotations and increase fields. The cowpeas were harvested from the alternate cereal forage block. Drilled and rowed sorgo were harvested from the rotations in the north fields.

The peas were picked from the cowpea varieties and stored inside to await threshing. The Sunrise kafir which was planted for horse feed was harvested this week. Everything is being shocked today, so as to get the bundles off the ground in case it should rain over Sunday.

Several varieties of grain sorghums will be harvested next week if weather permits. Winter wheat and rye are up to an excellent stand and both are growing off nicely. Rye was planted for soil protection in the vineyard, orchard and shade tree plantings. This is making rapid growth and with reasonably favorable conditions for another month will have a good protective cover.
Maximum temperature 82, minimum 35; precipitation, .10 inch.

TUCUMCARI:

September was characterized by unusually hot weather the first eighteen days; a ten day period of cool, cloudy, showery weather; and clear days, with rising temperature, at the close of the month. Frost seemed probable around the 27th, but 37 degrees was the minimum recorded, and it is hoped a few weeks of favorable weather will occur.

Milo is maturing fast, but is still too soft to head. Many plots of kafir show change in color, but comparatively few heads are fully mature, while some are barely in the milk stage.

Tucumcari, continued:

Fodder yield of kafir will be high, but at least three weeks of fairly warm weather will be necessary if grain yields are to be satisfactory.

Wheat probably never looked more promising at this date, while no doubt a greater percentage of the acreage was seeded in September than ever before.

Work the past week has consisted of hauling cowpeas, beans, Sudan grass, pulling broomcorn, and cutting increase cowpeas and Sudan grass, as well as some of the earlier plots in the forage block.

During rainy weather about five tons of 1926 grain sorghum seed was treated with coppercarb. It is probable this is much better seed than will be procured this season. Due to the lateness of spring rains the demand for seed did not meet our supply, so a large amount was left on hand.

Maximum temperature 85, minimum 37; precipitation, .44 inch.
Average hourly wind velocity, 5.4 miles.

BIG SPRING:

The first norther of the season hit this section of the country on September 27. It was accompanied by a slow drizzling rain, and during the day the maximum temperature only reached 53 degrees.

Cotton picking is getting well under way throughout the county; with a few exceptions light yields are being reported.

The cotton on the station was picked for the first time during the week. The first picking this year was made about two weeks later than last year, and the yields are about half of those of last year. Other work consisted of heading milo and hoeing weeds out of the orchard.

Maximum temperature 90, minimum 43; precipitation, .63 inch.

LAWTON:

Violent storms and cool, cloudy weather have held farm operations in check throughout the past week. Creeks have been running more than bank full and lowland fields have received damage in many instances. Traffic on highways and on railroads has also been seriously interrupted and retarded.

Lawton, continued:

The total precipitation recorded at the station from September 23 to October 1, inclusive, amounted to 5.29 inches.

Cotton has continued to open very slowly while the weather is so cool; on the other hand, the continued rains have been damaging to the bolls that are open.

Farm operations are at a standstill, but will be resumed at the earliest possible date in order to take care of fall seeding of wheat and barley.

WOODWARD:

Planting of practically all wheat, rye, and barley was completed this week. Cotton was picked the second time. Milo plots on rotations were headed. A few plots of forage sorghums were harvested.

Due to continued dry weather most of the sorghums are losing their leaves before they are ripe, so will be of less value than usual for forage purposes.

A light rain varying from one to one-half inch has put everyone in this section to planting wheat.

Maximum temperature 89, minimum 38; precipitation, .55 inch.
Average hourly wind velocity, 7.8 miles.

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OCT 3 1927

REPORT FOR WEEK ENDING OCTOBER 8, 1927.

JUDITH BASIN:

Cool weather prevailed most of the week but ended with the maximum for the week on Saturday at 62 degrees. Nights were cool with the temperature falling below freezing every night. Just a trace of snow fell during the light showers which were recorded four days of the week. The precipitation for September was only .46 of an inch while the normal is 1.76 inches.

The late spring wheat in the Basin has matured very slowly and very little combining has been done during the week. Only a small percentage of the total wheat crop, however, remains standing.

The fall tillage work on the rotations is completed. Plowing of forage experiments which have been discontinued was finished. Sweet clover pasture blocks are being plowed. Garden crops were harvested with good returns for cabbage and carrots but practically nothing on other vegetables; however, a very favorable garden yield was produced during the season.

Mr. Thomas W. Moseley, of the Huntley Station, made a visit on October 5 and 6.

Maximum temperature 62, minimum 25; precipitation, .49 inch.

SHERIDAN:

Fall plowing of the rotation plots was completed the first of the week. Potatoes were dug and sorted. The yield of potatoes was above the average, with a very small percentage of culls.

Threshing of crested wheat grass, the flax in the rotations, and a plot of sweet clover for seed was completed today. A light shower with damp weather afterwards delayed this work considerably.

Maximum temperature 59, minimum 22; precipitation, .12 inch.

DICKINSON:

Fair weather continued through the week with normal temperatures. Digging of potatoes was finished and the root crops were pulled.

Dickinson, continued:

A second seeding of winter wheat was made with the common and furrow drill on October 3. Where winter wheat was seeded in stubble on September 12, the grasshoppers had grazed the plants to the surface of the ground, cleaning up all of the plots. On the fallow plots the wheat was grazed only along the edges. Most of the hoppers have disappeared, so the second seeding probably will not be injured.

Husking of the rotation corn was started. The plots are yieldin 5-6 bushels by measure. About 25 per cent of this is fit for seed if it can be dried out before hard freezes come. When dry the corn will likely weigh out at about 30-40 bushels to the acre.

Maximum temperature 61, minimum 19; precipitation, .03 inch.

MANDAN:

Agronomy

Weather conditions have been very satisfactory for completion of much autumn field work. Temperatures have been moderately low, with freezing four nights of the week. Brisk winds and some sunshine have favored drying of corn in the shock.

Fall plowing, subsoiling and listing in the Rotation and Tillage experiment have been finished. The alfalfa variety plots and nursery were plowed on account of poor stand. New seedings will be made next spring. A brome seed block is being broken up for flax investigations.

Root crops have been harvested and stored. A small shallow pit was made for these crops near the cow barn. They will be fed to the station milch cows as long as they last. Except for the turnips, the quality was very good. The highest yield was obtained from a variety of mangel called 'Long Red'. The acre yield was 16.6 tons.

Maximum temperature 62, minimum 25; precipitation, Trace.

Arboriculture

Digging of nursery stock was continued this week. Northwest poplar and Green ash have been completed. Boxelder, Caragana and Russian olive remain to be dug.

ARDMORE:

The week was stormy and disagreeable. Rain and snow kept the ground so muddy that field work was possible only two days. On these two days the baling of hay was completed and part of field No. 14 was plowed.

The side walls of the power house were built during the week and digging for the pipe line commenced.

Potatoes were sorted and put into the cellar. The two plots in the rotations produced an average yield of 190.5 bushels an acre, of which 87% were marketable. The yield of potatoes was the highest yet secured at this station.

The maximum temperature for the week, 22, minimum 25; precipitation, .87 inch.

AKRON:

The week has been favorable for field work and for the germination and growth of fall sown wheat and rye. Wheat seeded in dry ground before the rains of last week is emerging this week-end. Prospects are good for some growth yet this fall. A good, vigorous fall growth of the wheat and rye would certainly lessen the soil blowing hazard next spring.

The fourth rate and date seeding of winter wheat was made on the 3rd. The remainder of the experimental row crops were harvested Monday. The filling of the silo was started Tuesday and completed by Wednesday evening. Considerable time was spent in packing the silage as it went into the trench. The beans on the rate and spacing corn project were threshed during the week. One one-tenth acre plot of Mexican Pinto beans yielded at the rate of 870 pounds, 14.5 bushels per acre. One one-tenth acre plot of Great Northern beans yielded at the rate of 450 pounds, 7.5 bushels per acre.

The machinery is being stored in the shed for the winter this week-end.

The silage corn was a late variety of commercial seed and was only in the roasting-ear stage when cut into the silage. The leaves were dry but the stalk and ears green and succulent. There was little or no shattering of the leaves in handling the corn. The yield ran about 7,400 pounds to the acre, which is considered low from the height and appearance of the corn. It is expected there was a loss of from 10 to 20% of moisture from the drying-up of the leaves. The silage was wet down as it was cut into the silo.

Akron, continued:

The sorghum nursery continues to ripen up. It is hoped the bags will protect the heads from the frosts thus far experienced and that there will be a continuing supply of viable seed harvested.

The lambs shipped to Denver last week brought $13.40 on the Denver market, and netted something over $9.25 each at Akron after all shipping expenses had been paid. The lot of 21 was very uniform in appearance and contrary to expectations there was no apparent difference between the lambs from sweet clover, the mixed pasture grasses, the native sod, and the weeds.

Maximum temperature 78, minimum 26; precipitation, .04 inch.

HAYS:

The weather during the past week has been most ideal (except for one windy day) for all kinds of field work. The temperature has ranged between 34 and 83. There was one light frost and a trace of rain.

Winter wheat drilling was commenced October 1 and finished October 4 on the plots. Recent light rains had moistened the surface soil so that the seedbed was in almost ideal condition for sowing. The first two days drilling is coming up nicely. Where weed growth was taken care of in this locality, the conditions are good for a yield above normal next year.

All except late replanted kafir plots were harvested September 29 and 30. The stover growth is heavy and seed above average. After cutting, the bundles were allowed to cure on the ground until the drilling of the wheat was finished. This partial curing will enable threshing to be done earlier than had the crop been shocked immediately.

The Experiment Station finished drilling the commercial fields Friday. Half or more of the wheat was drilled with a tractor this fall,-the first time a tractor has been used on the Experiment station for drilling, although it has become a common practice among farmers growing a large acreage of wheat. The station has all forces concentrated on harvesting the feed crops which are very good.

There have been enough grasshoppers scattered about the project to cause fear of some damage around the edges of plots of newly seeded wheat. To satisfy the hunger of the hoppers before the wheat emerges, 300 or more pounds of poison bran mash have been spread during the past few days.

GARDEN CITY:

Fair fall weather has prevailed during the past week. Temperatures fell rather low at night but no killing frost has been recorded thus far.

It looks now as though the greater part of the row crops would mature. Kafir is still a little immature. All milo on the project except that in the date test was harvested during the week. Winter wheat is emerging to what appears to be a good stand. The remaining plots of wheat and plots of winter rye were reseeded during the week.

DALHART:

The weather has been quite cool at night but with fairly warm days. Rain has threatened the past few days and a light mist was on this morning. The remainder of the day has been clear and warm.

Field operations have been in full swing all week. Harvesting has received the major attention with more in sight for next week. The plots are being headed as rapidly as possible but there is nothing so urgent as to require additional labor.

The crops are maturing nicely but some will require from one to two weeks to fully mature with favorable weather. The replants in the rotations (listing) will not have the slightest chance to mature unless frost is delayed to the end of the month.

The selection of seed for next year's planting has been made this week for those varieties having matured.

Small grains are making excellent growth and are looking good. Soil samples were taken the first of the week. The mess house is being repaired in necessary places for painting.

TUCUMCARI:

Perfect autumn weather has prevailed the past week and crops have matured remarkably fast. While many of the late forage sorghums and perhaps one-half of the grain sorghums will doubtless not mature nearly a full grain crop, indications now point to full maturity of rotation milo and kafir, planted June 20 to 25. M.C. wheat and rye, seeded September 16, are making excellent growth.

Tucumcari, continued:

Work the past week has included picking and hauling cowpeas, pulling and seeding broomcorn, cutting of a number of early forage plots cutting and shocking of corn and four plots of M.C. kafir, and completing plant and stalk counts. Corn is not mature, but lodging was becoming serious, as on the four kafir plots.

Heading of rotation milo can be begun early next week, and to prepare for this, as well as for the cutting of all rotation kafir in case frost comes, practically all increase rowed and broadcast sorgo has been cut and shocked during the week. This consisted of about 15 acres, and all of this will make a high fodder yield, the plants being slender and leafy, although practically no grain was produced. In case frost occurs, sorghum plots now standing, about 100 in number, will be cut as rapidly as possible. It is hoped many of these can be headed before frost.

Milo should make an average yield of not less than 35 bushels, while kafir promises at least 25 bushels. Corn will be unusually high in total yield, but grain yield will doubtless be rather low, with much soft corn.

Maximum temperature, 87, minimum, 40; precipitation 0. Wind velocity, 5.0 miles per hour.

Precipitation for the year October 1, 1926 to September 30, 1927, totaled 15.15 inches. Since January 1, 13.30 inches; and during the growing season, April 1 to September 30, 12.32 inches.

BIG SPRING:

Weather conditions during the past week were very favorable for farm work until Friday when a norther blew up; this was followed by a slow, drizzling rain.

Cotton picking throughout the county is progressing rapidly; about three thousand bales have been received at the local compress up to date.

Station work has consisted mainly of picking cotton, and heading milo, kafir, and feterita from the increase fields.
Maximum temperature 92, minimum 49; precipitation, .42 inch.

WOODWARD:

Work of the week has been mainly devoted to filling dairy silo and finishing wheat planting. Practically all of wheat planted last week is up.

Wheat on the station and over the county bids fair to have a hard time unless rains occur, as it is emerging slowly from the ground and the surface soil is very dusty and dry, and blows easily.

Sorghums continue to "dry ripe", losing their leaves in the process, due to continued drought.

Maximum temperature 89, minimum 38; precipitation, .03 inch.
Average hourly wind velocity, 7.3 miles.

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OF
PLANT INDUSTRY

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U. S. DEPARTMENT OF AGRICULTURE

OCT 15 1927

REPORT FOR WEEK ENDING OCTOBER 15, 1927.

JUDITH BASIN:

This week has been ideal for cutting the later grain as bright and warm days, with no precipitation, have prevailed. Combines have been busy all week but some of the later grain still remains to be harvested.

The warm days of the last part of the week ending October 8 continued until the middle of this week, when we had two days which were a little cooler. The last part of this week has been quite warm.

The plowing of the two sweet clover hog pastures, started last week, was finished and two sweet clover blocks used for cow pastures were also plowed. The corn on the rotations was weighed, the yields seeming quite favorable, although no comparison with previous years has been made. Weights were also taken on the corn varieties. The threshing on the station was completed when two varieties of sweet clover, cut for seed, were threshed.

Maximum temperature 73, minimum 25; precipitation, 0.

SHERIDAN:

Field beans were threshed and Sudan grass from the solid seedings were hauled and weighed the first of the week. Some of the land intended for forage crops next year, and as much of the land intended for seeding down for pastures as has been cleared of crop has been plowed. Flax still remains to be threshed off some of the land broken up last spring. Hauling and weighing of corn fodder from the rotations was begun yesterday.

Trips over some parts of the county during the week showed a large amount of threshing still to be done.

Maximum temperature 76, minimum 27; precipitation, Trace. (snow).

DICKINSON:

Mild, fair weather continued throughout the week.

The field work consisted of husking and weighing the corn on the rotations. Samples were saved for drying to obtain the final weights. The yields were a little better than expected and the dry weight of the plots will average close to 40 bushels.

Maximum temperature 71, minimum 20; precipitation, .11 inch.

MANDAN:

Agronomy

Field work was delayed one day during the week because of rain, and a half day because of high wind. Odd jobs of plowing were completed and corn in the breeding block was cut. Flax threshing was also completed, finishing the threshing for the season. All field work for the season, with the exception of corn husking, is practically completed.

Maximum temperature 79, minimum 23; precipitation, .26 inch.

Cooperative Grazing Experiment

The grazing experiment closed for the season on the 15th. The cattle just about held their own during the month. The gains for the season will, no doubt, be the highest that have been obtained since the experiment started. The final weights have not been computed.

Horticulture

Small fruits, including gooseberries, currants, grapes and raspberries, have been pruned. Cutting of gooseberries, grapes and of currants, have been made and divided into seven lots for the "methods of growing" test. Plum pits are being washed out and will be planted during the coming week. Orchards are again being gone through to remove blighted parts on apple and crab trees.

All vegetables from the Acre garden have now been harvested. Yields of the various crops have been compiled and run as follows:-

Beans, navy	92 lbs.	Beans, wax	738 qts.
Beets, early	145 "	Beets, fall	396 lbs.
Cabbage, early	450 "	Cabbage, late	895 "
Cauliflower, early	126 "	Cauliflower, late	80 "
Carrots, early	525 "	Carrots, fall & win.	748 "
Cucumber	212 "	Melons, water	160 "
Melons, musk	28 "	Onions	1600 "
Parsnips	414 "	Peas	176 qts.
Pepper	105 frts.	Potatoes	935 lbs.
Pumpkins	855 lbs.	Rutabaga	718 "
Sweetcorn	1171 ears	Squash, summer	295 "
Squash, winter	674 lbs.	Tomatoes	1224 lbs.

Mandan, continued:

The season on the whole was very favorable for the majority of the crops. Being cooler than usual, hot weather crops, such as squash, melons, and tomatoes, were rather late and ripened approximately 65% of the fruits set.

The quality on the whole was very good. Sweetcorn selections were picked during the early part of the week. Owing to the late season, a large number of selections did not mature before frost, the earliest strains being decidedly the best.

About 2,500 Darwin tulips were planted on the grounds the latter part of the week. The soil is very dry at present and, unless rain comes, it may be necessary to water the shrubbery before the frost sets in.

Mr. K. E. Parks, Dairy Engineer, Bureau of Dairying, has been here most of the week studying the new dairy project. Mr. F. M. Harrington, Head, Department of Horticulture, Montana State College of Agriculture, Bozeman, Mr. Dorr Skeels, Professor of Forestry, Missoula, and Mr. C. A. Gillett, Extension Forester, Bottineau (N. Dak.) Forestry School, are here today, Saturday.

ARDMORE:

The week was favorable for outside work. During the week the hog pastures and the grain variety plots were plowed. Work was continued on the power house and pipe line.

Husking of the corn plots in the rotations was commenced on October 14. Samples of both grain and fodder are being saved to determine air dry weights. The biggest yield of ear corn secured up the present time is 408 lbs. per plot. The corn probably weighs about 85 lbs. per bushel.

The 60 pigs that have been on self-feeder test were shipped October 12.

The 40 yearling steers to be used in the winter feeding test were received today. They appear to be a good grade of cattle and are uniform in size and quality.

Maximum temperature 78, minimum 23; precipitation, Trace.

ARCHER:

The first week of October was cold and murky with occasional storms of snow and rain. During this time the potatoes were dug and stored. On the average a good crop was secured. The cutting of corn and the putting up of silage was continued when the weather permitted. The snow and frosts caused the upper part of the corn crop to drop making harvesting with a binder more difficult.

The past week has been dry and warmer with high winds during the fore part. This made field work difficult, however. It dried out the shocked grain and made it possible to thresh the increase fields. The threshing of the increase fields will be completed today. There should be more than sufficient grain to carry the stock over winter.

Dean J. A. Hill, of the University of Wyoming, visited the station October 14.

Maximum temperature 73, minimum 24; precipitation, .45 inch.

AKRON:

Seed corn from the sheep rotation standing corn was gathered in early in the week. One tenth-acre plot of Wisconsin Golden Glow corn was husked. Lot No. 4 (ewes) was weighed off the mixed pasture grasses across the railroad on the 10th, because of the shortage of feed.

Bagged heads of sorghums in the nursery were brought in early in the week and the remaining plants cut for feed. Many of the bagged heads blighted this year so that the seed supply another year will be short. This is the first year any quanity of bagged heads have blighted, and it is wondered if the strings attaching the bags might have been drawn too tight. Three more pure strains of extra early grain sorghums were obtained in the nursery this year.

The variety bean experiment was threshed near the middle of the week. The average yield of all the varieties and all the replications was approximately 500 pounds per acre. The grain sorghums from the General Forage Variety experiment were threshed the latter part of the week. The yields were very light due partly to poor stands and partly to lack of maturity. Dwarf Freed's H.C. 2521, Freed's sorgo, Coes sorgo, Elton sorgo, and Otis kafir were practically mature. Sieglinger's Freed, and Early White milo were only slightly past half mature.

Akron, continued:

Inspection of the winter wheat plots today reveals an emerged stand on all preparations except corn land and fall plowing. The stands on fall disking are still a little uneven. Winter wheat has made but little progress since the rains two weeks ago. Leaves appear to be shedding from the trees normally this fall, the orchard and the windbreak plantings presenting more color than has been observed here the past six to seven years.

Maximum temperature 78, minimum 23; precipitation, .04 inch.

NORTH PLATTE:

Fair weather has prevailed during the week. High winds prevailed for several days early in the week. Station work has consisted of late plowing on D. L. A. plots, digging potatoes and husking seed corn.

Under irrigation on alfalfa sod, 623 bushels of excellent quality Cobbler potatoes were harvested from a two-acre field.

Winter grains have emerged with excellent stands on all methods of seed bed preparation.

COLBY:

Sorghum cutting was completed during the week. Milo and feterita were fully mature while the kafirs and all except the very earliest of the sorgos were not.

A temperature of 31 degrees is the lowest temperature which has been recorded but frost has been noted on several occasions. The first frost that merely nipped a few of the tenderest plants came the night of October 8. A frost that is actually a killing frost is yet to come. The first of the week was cold and blustery, while the last half of the week has been ideal weather.

Winter wheat is all up to an excellent stand. Grasshoppers are here in large numbers. It is planned to distribute poison the first of the week. The last few few nice days is when the most damage has been done.

Two silos, with a combined capacity of 135 tons, have been filled. This gives us ample for our needs for this winter. They were filled with Early Sumac sorgo which went into the silo in excellent condition.

Colby, continued:

Some soil blowing occurred during the night of the 11th. It will be necessary to protect wheat and bare ground with lister furrows during the winter. There is not as much bare ground this fall as last but what there is is in better condition to move. Those farmers who have summer fallow land are worrying about it blowing already.

HAYS:

The weather has been fine throughout the week for all kinds of field work. One killing frost occurred, but no rain was received.

The work has consisted largely in heading kafir plots where the stalks are to remain on the ground over winter. Soil sampling, and spreading poison to protect the fall-seeded plots from grasshopper injury was also accomplished.

Winter wheat is coming up to a good stand on most all plots, the exception being the late-worked plots.

GARDEN CITY:

The weather during the past week has been almost ideal for field work. Temperatures have reached a rather high level during the day and have lowered to near frost at night.

It seems that sorghums have not matured as they should. A part of this is, no doubt, due to the hail damage which they suffered. The Dawn kafir on the dry land project seems to have stood still for at least two weeks. A part of it was cut during the week and the remainder will be harvested the coming week. At present the station force is busy filling the silo.

Winter wheat has emerged to an excellent stand on all plots that were seeded two weeks ago. Wheat and rye on plots seeded a week ago are just beginning to emerge.

Maximum temperature 85, minimum 32; precipitation, 0.

DALHART:

The cropping season was cut short on the 11th with a heavy freeze. During the afternoon of the 11th a heavy bank began rising out of the northwest and accompanied by a strong wind which grew steadily colder. During the night the temperature dropped to 24 and was sufficient to kill all crops.

Dalhart, continued:

The week has been one grand rush in bringing the harvesting to a close. Today will finish the binding of everything which is to be harvested with a binder. The two binders have been going steadily since Wednesday morning. Nearly all of the plots which were mature had been headed before the freeze. Some of the other plots were nearly mature, while some were just past the bloom. The latter were all the replants, consisting of listed plots. Harvesting of the peanuts was begun today, Saturday, and will continue until Monday. The peanuts were about at the right stage to harvest when killed by the freeze.

The plots which were practically mature will be headed at the time of shocking. This will permit threshing at a much earlier date than if the grain were left on the stalks until the latter were dried sufficiently to weigh and stack. The freeze coming this early has increased the amount of labor required to take care of the crops at the time they should be. The same condition is existing over the entire panhandle section.

TUCUMCARI:

The earliest killing frost on record at this station occurred on the morning of October 12, when a minimum of 31 degrees was recorded. This was sufficiently severe to completely kill every leaf on all field crops. Rotation milo was mature, while rotation kafir ranged from the milk stage to maturity, with perhaps an average of 20% of the seed at a stage where shrinking will occur. Only partial maturity had occurred on a number of the grain and forage sorghum variety plots, planted June 18.

Field work had been impossible prior to June 15, due to the dry soil, since only .51 inch precipitation was received January 1 to June 11; so the growing period this season was slightly less than four months, keeping in mind that all preparation of soil took place after June 15.

During the past week about one-third of rotation milo plots have been headed. All other plots except rotation milo, as well as a large amount of increase, have been cut and shocked, and increase broadcast sorgo was hauled and stacked. The last picking of cowpea seed was made, while two July 1 date broomcorn plots were pulled.

Heading of milo and binding of stalks will be begun Monday. Thirty-three variety plots cut in one-half day constituted the best record made with the binder.

Tucumcari, continued:

A half-bushel of Chinese Elm seed was picked just before the frost and most of this has been sent to the Woodward Station for greenhouse planting. While the Chinese Elm at this station usually bloom in February, and the young seeds are killed by frost, this makes the . . third year in six that fall blooming has occurred on a few trees. In two seasons fairly mature seed has been obtained before frost.

No precipitation has been received this month and weather has been perfect for harvesting. Wheat is in excellent condition in the southern part of the county.

Maximum temperature 83, minimum 31.

BIG SPRING:

Weather conditions during the past week have been very favorable for field work although the nights have been too cool for the best development of late cotton. A late frost and optimum growing conditions until then are necessary if this late cotton is going to mature.

The winter wheat plots were harrowed and planted during the week. There was plenty of moisture in the soil at planting time, so a good stand should be obtained. An increase field of Reed's kafir was headed and a field of Sudan grass was cut for the second time. Other work during the week consisted of picking cotton.

Mr. J. A. Evens, Assistant Chief of the Office of Cooperative Extionsion Work, was a station visitor October 10.

Maximum temperature 90, minimum 40; precipitation, 0.

LAWTON:

Clear weather which prevailed most of the week enabled field operations to progress satisfactorily.

Cotton continued to open rapidly, and the second picking is going forward steadily. Most of the early maturing varieties do not show much storm-proof resistance this year, but, fortunately, there has been but very little loss in this respect so far.

Lawton, continued:

The small grains that were seeded on the rotation plots and in the variety and date of seeding tests germinated satisfactorily and showed good stands within six to seven days.

Considerable difficulty with volunteer oats and barley has been encountered this fall, due to the fact that it did not show up until just about planting time. The late September and early October rains are probably responsible for this condition.

Maximum temperature 80, minimum 40.

WOODWARD:

Work of the week has consisted entirely in the harvest of the sorghum crops. All kafir plots on the rotations were headed into wire baskets, as were all milo plots not headed last week, and all stover on rotations was bound. All plots except late dates on Cereal project were headed. About ten acres of sowed feed was cut and stacked.

Most wheat and rye on the station is up to a good stand, as it is over the country, generally. Rain is needed, however, so it will make growth enough to cover the ground, as soil is beginning to blow badly.

Maximum temperature 84, minimum 41; precipitation, 0.

Average hourly wind velocity, 8.7 miles.

NOV 11 1927
PLANT

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 28 1927

REPORT FOR WEEK ENDING OCTOBER 22, 1927.

HUNTLEY:

Weather during the past week has been clear and, most of the time, unseasonably warm. Where moisture is plentiful winter wheat and rye have made a very good growth during the past two weeks, but on tillage methods other than fallow these crops are in need of rain. Stands are rather thin and the plants are rather "spindling".

Harvesting operations on the Dry-Land Project were completed with the digging of potatoes and root crops during the week. Beans were threshed and some of the corn has been hauled and weighed. A few corn plots have been husked and the yields received so far have all been over 50 bushels to the acre of well matured grain.

Maximum temperature 86, minimum 31; precipitation, 0.

SHERIDAN:

Clear skies with extraordinarily high temperatures for the season prevailed throughout the entire week. This weather has provided excellent conditions for getting outside fall work cleaned up.

All of the corn from plots and all of the Sudan grass has been hauled and weighed. Sorgo was reshocked in the field, the stalks being cured but little as yet. Flax on breaking has been threshed, completing all threshing on the station for the season. Plowing is now in progress on land which it is intended to seed to grass for pastures next spring.

Hogs to be used for feeding work this winter were hauled the first of the week.

Maximum temperature 84, minimum 33; precipitation, 0.

DICKINSON:

Ideal fall weather continued all week with temperatures well above normal.

The balance of the rotation corn was husked and weighed and the stover weights obtained. Sorghums and Sudan grass were also weighed. The Sudan grass was practically dry but the sorghums contained considerable water so that samples were kept to obtain the dry weight.

Dickinson, continued:

Farmers have made good use of the fine weather to clean up field work. Practically all threshing in the area is completed and about half of the grain has been delivered to the elevator. On account of the steady decrease in price during the week much of the grain is now being stored. The price of No. 1 Dark Northern wheat is only $.99, the lowest for several years.

Maximum temperature 82, minimum 31; precipitation, 0.

MANDAN:

Agronomy

Weather the past week has been exceptionally mild for this time of the year. Roads in the main field rotations were seeded down to a mixture of crested wheat grass and winter rye. The ground is so dry that there is no chance of the grass coming up before a good rain. Blowing takes place to such an extent on the roads that it seemed necessary to make an effort to check it. Corn has dried out very well during the week and will soon be ready for shredding. Winter wheat and winter rye are not entirely up yet. The seeding on fallow show a good stand.

Maximum temperature 87, minimum 36; precipitation, 0.

Cooperative Grazing Experiment

The cattle used in the experiment were shipped to the Agricultural College on the 18th. Part of them will be used in a silage feeding experiment at the college.

Horticulture

The work of eradicating blight in the station orchards has been continued during the week. A number of badly affected trees have been pulled out and those not so heavily affected severely pruned.

Seed of plums, sandcherries, Crataegus and Siberian crab for stock purposes has been washed and cleaned. The various selections of sweetcorn and tomato strains, collected some time ago were gone over and cleaned.

The taking of fall notes on the season growth of ornamental plants in the Arboretum is at present in progress. While the growth was splendid during the season, the soil is now so dry that there is considerable danger of winterkilling of the semi-hardy species, unless precipitation of some sort is received before the ground freezes.

ARDMORE:

The week was one of the finest of the season. Wind movement was low during the entire week and practically every day was cloudless and warm. Field work was carried on without interruption.

Corn husking occupied most of the force. The plots in the main rotation were finished and the variety plots will probably be finished. A five acre field of corn in the dairy pasture is being husked.

The winter grains in the rotations came up during the first part of the week.

The steers used in the summer grazing test were shipped to Omaha on October 20. The gains on the different pastures during the season were as follows:

	Last Period Gain	Seasonal Gain	Number Head
150 A. pasture	-19.5	201.0	10
80 A. pasture	-52.0	176.0	10
160 A. rot. pasture	-20.0	187.8	16
320 A. les. pasture	36.2	304.5	21

The following table gives the seasons' results with pigs on self-feeder:

	Amount fed O.M.	Tank.	Corn	First Wt.	Last Wt.	Gain	Gain per head.
Dry lot, oil meal tankage corn	400	888	7000	686	2967	2281	152.1
Dry lot, tankage corn		895	6800	692	2714	2022	134.8
Past. oil meal tankage corn	202	423	7700	687	3249	2562	170.8
Past. tankage, corn		435	7600	692	3063	2371	158.1

The pigs were placed on test on June 23 and the test was completed on October 9. It will be noticed that the hogs receiving oil meal made the highest gains both in dry lot and the alfalfa pasture.

Maximum temperature 83, minimum 32; precipitation, 0.

ARCHER:

The weather has been very favorable for field work in that it has been warm and dry with but little wind.

Archer, continued:

During the week the work at the station has consisted of threshing and the putting up of hay. The remainder of the Dry Land plots were threshed. In the varietal experiments with small cereals there remains part of the barley to be threshed. There also remains about 1½ days of corn cutting.

The winter wheat has made rapid growth during the last two weeks and is in good condition. There is a heavy volunteer growth of oats wherever this crop was produced due to shattering by hail. Due to this fact the grain yield of oats is very light.

Maximum temperature 76, minimum 35; precipitation, 0.

AKRON:

The past week has been very warm and favorable for the growth of fall sown grains. Right here on the station there is moisture enough and the wheat has made marked progress but at other points about the county there is complaint about the lack of moisture to even germinate the wheat.

Grasshoppers are very numerous on the station and steps will be taken to poison them early next week before they can damage the wheat and rye.

The first corn husking of the season was done this past week with the shucking-out of the Rate and Spacing Corn Experiment. The corn was not solid and the yields were calculated on the basis of 80 pounds to the bushel. The yields ranged from 13.8 bushels per acre on the double spaced rows to 41.9 bushels per acre on the regularly spaced rows with plants 12 inches apart in the row.

Mr. Robertson and Mr. Deming were down today from the College to make fall counts on the Cereal Small Grain Nursery.

Maximum temperature 80, minimum 39; precipitation, 0.

GARDEN CITY:

Ideal weather has prevailed during the past week and no killing frost was recorded.

Garden City, continued:

All sorghums are now in the shock. Winter wheat has emerged to good stands on all plots and is making a rapid growth. Soil moisture samples show little moisture below a depth of 18 inches on land cropped the past season and only about 2½ feet of moisture on summer fallowed ground. Wheat in general in the surrounding country looks good.

The fourth cutting of alfalfa on the irrigated project is now in the shock. Practically all row crops on the station have been cut.
Maximum temperature 86, minimum 34; precipitation, 0.

DALHART:

Excellent weather has prevailed during the entire week for the continuance of harvest. The days have been clear with little wind. The temperatures during the day have ranged from 84 down to 79, although it has seemed unusually warm. The minimum temperature for the week is 32.

The work during the week has been one continuous round of heading and shocking. Extra labor was employed over Saturday and on Friday afternoon when school was dismissed. The only labor available here is high school pupils.

With favorable conditions the harvest ought to be complete by the middle of next week. This will include the shocking and heading of all experimental plots which matured sufficiently. After this work is out of the way there is considerable work in heading the increase fields.

This country is getting rather dry just now and a rain would be acceptable for the wheat farmers. The small grain outlook at present is good but it is doubtful how long the present supply of moisture will hold out. Soil samples were taken on the station wheat methods the first of the week, just one month from planting. The results of this sampling show that the moisture is holding out in good shape. In several instances there is an increase in moisture which was likely drawn from the depth below the sampling.

BIG SPRING

Weather conditions during the past week have been very favorable for farm work. Cotton is opening fast, but at present there is a shortage of pickers to gather it. About three hundred bales a day are being received at the local cotton press.

Big Spring, continued:

The winter wheat plots, which were planted last week, have all emerged to good stands.

The second cutting of Sudan grass from an increase field was hauled in this week. Although the yield was light, a fine quality of hay was obtained. A block of sumac sorgo was harvested and shocked, and part of the cotton plots were picked during the week.

Maximum temperature 85, minimum 38; precipitation, 0.

TUCUMCARI:

Weather conditions the past week have continued favorable for fall work. No precipitation has been received this month, days are clear and warm, and no frosts have been received since October 12, when the killing frost occurred. Heading of milo has been completed, peanuts have been dug and cocked, and a large amount of increase broadcast sorgo has been hauled during the week.

Milo is drying rapidly in baskets and it is hoped threshing may be begun within ten days. Kafir is curing fast in the shock, but will probably not be ready for threshing within a month.

Wheat in this portion of the state is looking very favorable and the acreage is exceptionally heavy. Station plots of wheat and rye are in fair condition, while wheat seeded in orchard and vineyard nearly covers the ground.

Maximum temperature 82, minimum 39.

WOODWARD:

Weather of the week has been tranquil, with little wind and no rain. Wheat over the country is making an excellent growth and covering the ground well, despite the fact that most of it was planted immediately after only half an inch of rain, and it was expected that much of it would die if heavier rains did not occur soon. Wheat evidently connected up with deeper moisture better than expected.

Farmers over the country are heading kafir and milo rather reluctantly as it is not fully ripe, but it is drying up and danger of frost is imminent.

Work of the week on the station has consisted principally of baling hay for dairy. A little sowed feed was cut and some kafir headed. Jujubes, the latest fruit crop to mature, were picked. These give fine promise of becoming one of the most reliable fruit crops of the country.

Maximum temperature 87, minimum 40; precipitation, 0.

Average hourly wind velocity, 3.7 miles.

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WEEKLY STATION REPORTS

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DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 29 1927

REPORT FOR WEEK ENDING OCTOBER 29, 1927.

JUDITH BASIN:

October in the Judith Basin has been marked by a long spell of ideal weather for completion of late harvests. Very little precipitation has been received so that practically all crops have been gathered in good condition.

Winter wheat and rye in the Basin is in favorable condition. Several reports have come from farmers stating that some plants of winter wheat are turning yellow. An inspection was made but no damage from disease or insects has been found. With prospects of rain the possibility of beneficial returns to winter crops appear favorable.

Crops on the station are in good condition. Growth in the orchard and shelter belt has been recorded and preparations for winter are being made. The lov yards and pens, which previously made undesirable conditions during wet weather, are being graveled.

After due consideration the dairy herd of Holsteins, which have been on pasture tests, have been discontinued and a grade herd of milking Shorthorns was obtained from the North Montana Station, together with a registered bull. It appears that the dual purpose herd will conform to dry land conditions in central Montana very satisfactorily. Local interest indicates the advantage of this type of livestock. We believe that it will be possible to improve the herd tremendously by the use of the registered sire. As this is the only station in the state carrying the dual purpose livestock project, we feel that valuable results can be obtained from this breeding and cropping plan.

Visitors during the week included Messrs. Lee Popham, of the Office of Cereal Crops and Diseases, Robert Gaalas, of the Huntley Station, D. B. Noble, Fergus County Agent, Nelson Graves, of the State Seed and Nursery Company of Helena.

Maximum temperature 73, minimum 30; precipitation, .25 inch.

SHERIDAN:

Good weather continued through the past week, although the last few days have been somewhat cloudy and cooler than the previous week. A light shower occurred this morning, but there was not enough rain to interfere with outside work.

Sheridan, continued:

Husking corn from the rotations has been in progress all the week. All of the fall plowing that can be done now was completed about the middle of the week. Sorgo was hauled from the rotations and other seedings yesterday. The stalks have cured very little during the past month of good weather and samples of all plots were taken to determine the dry weights.

All fall seeded grain except the October 16 seeding of winter wheat emerged some time ago and has made a good growth.
Maximum temperature 79, minimum 32; precipitation, .05 inch.

DICKINSON:

Most of the week was fair, pleasant weather, with temperatures above normal, though cooler than the previous week. On Saturday morning a light rain started and continued most of the day. This was the only rain during the month which wet the soil to any extent.

Husking of the corn varieties was completed and the corn and stover weighed.

Some straw of crested wheat grass was baled and stored in the barn to be fed to the horses.

The garden was manured and plowed.
Maximum temperature 80, minimum 31; precipitation, 0.

MANDAN:

Agronomy

Weather the past week was very favorable for this time of year. No field work was done, as about all work is completed except corn shredding.

It is raining today. This will no doubt delay corn shredding for several days.
Maximum temperature 80, minimum 31; precipitation, Trace.

Mandan, continued:

Horticulture

Seedlings and budded stock in the seedbeds and nursery are now being dug and heeled-in, or otherwise stored for the winter. The stand and growth of most seedlings was quite satisfactory in the seed beds this year.

Seeds resulting from the hand crossing work with fruits are now being planted. There are a large number of apple and crab seeds, and fewer plum, cherry and gooseberry seeds.

The gardens are being cleaned up and manured, preparatory to fall plowing.

Visitors of the week included President Cobb, College of Forestry, Bottineau, North Dakota, and Mr. J. R. Dawson, Dairy Husbandry, Bureau of Dairy Industry.

ARDMORE:

The weather continued clear and warm during the first five days of the week. The last two days were cloudy and threatening. A misty rain is falling today. Wind movement was low during the week. The average wind velocity was only 2-3/10 miles per hour.

Good stands were secured on all plots of winter grains. The conditions of both winter wheat and winter rye is exceptionally good.

Husking of corn in the shock was completed on October 28. Sorgo is still too moist to stack.

The garden was manured and plowed and two 5-acre fields in the dairy pasture were plowed during the week. This completed plowing for the year.

The engine house was completed except for pouring the floor. There is still a considerable amount of work to do in laying the pipe lines and moving equipment.

Ardmore, continued:

The forty head of steers to be used in the winter feeding test were dipped during the week. This lot of steers is uniform and of exceptional good quality. The two year old steers shipped to Omaha recently brought $86 per head on the Omaha market.

Maximum temperature 80, minimum 31; precipitation, Trace.

ARCHER:

Weather conditions during the first five days of the week were very favorable for field work which consisted of stacking millet hay. This crop remained in the field for some time in large piles.

It started to rain Friday night and has continued most of today, Saturday. This stopped field work and the men were put to cleaning grain, sorting and weighing potatoes and repairing machinery. There remain about two more days of hay hauling.

The new house is complete with the exception of the installation of the furnace and the Superintendent now occupies it.

Maximum temperature 74, minimum 36; precipitation, .35 inch.

AKRON:

Warm, clear weather continued to prevail during the past week. The continued absence of consequential rains together with warm, clear days has created a condition anything but favorable for fall sown wheat. At this date there are no fields of wheat in the vicinity of the station showing green and on the station all wheat is suffering for moisture except on fallow preparation. Wheat sown on fall plowed or fall disked small grain stubble and on corn ground shows a percentage germinated and dead. It is impossible to determine how this may damage the stands until rains of enough consequence are received to insure emergence. It is so late now that rains would likely be followed by cold weather so that it may be impossible to estimate stands before spring.

Grasshoppers are more numerous on the station than they have been for several years. It does not now appear that wheat has been damaged to any extent but unquestionably it would be damaged were the present warm weather to continue for any great length of time. Three hundred pounds of bran was poisoned and scattered early in the week in an effort to kill off the hoppers.

Akron, continued:

Work during the week has been the constructing of a permanent fence on the new land across the railroad along the right-of-way, and the husking of the variety corn experiment. Samples of the corn varieties are being held for later weighing. On the basis of the preser weights the yields will range from about eight to possibly twenty bushel per acre.

Fully 90% of the forest and fruit garden trees have shed their leaves normally by this time.

Maximum temperature 78, minimum 35; precipitation, .04 inch.

COLBY:

With the exception of Saturday the temperature has remained mild all week. In fact, the twelve previous days had maximum temperatures in the 80's. There has been very little moisture this month so that wheat in various parts of the county is beginning to need moisture. The warm weather has caused the wheat to use up moisture, and has also permitted the grasshoppers to take a heavy toll in many fields, in spite of the poisoning which has been done. There are borders around the plots next to stubble plots where grasshoppers have eaten the wheat. Poison has been spread twice for the hoppers.

Sorghum threshing will start the coming week. Considerable time has been devoted the past two weeks in listing ground to go into the winter so as to prevent soil blowing.

Corn husking has started in the county. The yield is not as good as a great many anticipated. A few corn plots have been harvested on the station.

A rain of .20 inch was received Friday night.

GARDEN CITY:

The weather has been unsettled during the past week, with a high wind velocity for the past three days. A shower totaling .07 of an inch of rain was received last night. No killing frost has been recorded during the week.

Garden City, continued:

The past two days have been spent in harvesting cooperative sorghum tests with farmers south of the sandhills. Sorghums are good in that section of the county.

Most of the wheat in this county is up to a good stand and has made a rapid growth during the past two weeks. A few farmers have not finished drilling.

Grasshoppers are doing considerable damage to early seeded wheat. Some farmers are reporting areas as large as fifteen to twenty acres completely destroyed by this pest. Much poisoned mash has been spread in order to control the hoppers. So far, no damage has been done to wheat growing on the station.

DALHART:

Splendid working weather has prevailed during the entire month. With the exception of a few days the temperatures have ranged fair,, and none down to freezing since the freeze of the 12th.

For the past three weeks there has been no wind to operate the windmill until this week. There has been plenty of wind the past three days. Last night, Friday, about 8:30 p.m., a storm came up suddenly and lasted only about 20 minutes from start to finish. The real part of it lasted less than 5 minutes. During this 5 minutes a good deal of damage was done on the station. A 500-bushel metal grain storage tank was lifted off the foundation and left in the roadway between the superintendent's residence and mess house, completely demolished. This distance is about 100 yards through trees, etc., and the only damage done enroute was to bend a 3-inch pipe used as an electric light pole. Not a tree was scratched in the process of moving. During this short time....22 inch of rain fell which was the first recorded this month. Shocks were blown down and other disturbances of minor importance done during the short spell.

This week the work of heading is finished with the exception of just a few variety plots which will be left until after threshing is started and these threshed from the bundle.

One day's threshing was done this week. What is considered as our best crops were theshed in order to get baskets for finishing the heading. The best yield recorded is 51 bushels to the acre on fallow. The lowest yield recorded was 22.4 bushels for the 3rd date of milo, not on fallow.

Dalhart, continued:

Heading on the increase fields will be started the first of the week and continued until it is finished.

TUCUMCARI:

Weather this month has been clear, warm, and dry, with very low wind velocity, with the exception of the past two days.

Precipitation of .18 inch last evening, Friday, was the first received this month, while the past two days the wind has blown a gale. Conditions have been perfect for harvesting and in most cases all crops are in the shock. Wheat is growing well in most localities, although in isolated spots moisture is urgently needed.

During the week the remainder of broadcast increase feed was stacked; baskets of heads, about 180 in number, hauled to the machine shed; and threshing was begun. Milo can be threshed immediately, but it is probable kafir will require at least two weeks longer.

Maximum temperature 84, minimum 38; precipitation, .18 inch.
Average hourly wind velocity, 3.8 miles.

BIG SPRING:

Ideal cotton picking weather has prevailed during the past week; cotton is being gathered very rapidly, and an extra good sample is being obtained.

The corn plots were husked and the stover hauled and weighed during the week; very light yields of poor quality corn was obtained.

A second picking of peas from the variety plots was made. Cowpea seed from an increase block was also picked for seed.

Maximum temperature 89, minimum 44; precipitation, 0.

WOODWARD:

Work of the week has consisted entirely of the harvest of sorghum crops and the filling of a big trench silo built to take care of our heavy tonnage of rough feed.

Woodward, continued:

Wheat over the country is generally in very good condition, having made enough growth to keep soil from blowing readily. It has, however, in most cases, formed no permanent roots, relying altogether on its primary or temporary root systems. A rain of one inch would insure the establishment of permanent roots which seem to require moisture in the surface two or three inches of soil to stimulate their starting. Rain is falling today and it may be that enough will be received to insure wheat rooting well.

Maximum temperature 90, minimum 41; precipitation, Trace.
Average hourly wind velocity, 7.5 miles.

NOTE:

The Weekly Station Reports of this office will be discontinued for the present year with the issue containing station reports for the week ending November 12, 1927.